Construction Management/General Contractor (CMGC) Advertisement Process

The advertisement process for CMGC projects differs from traditional design-bid-build projects in several ways. In the CMGC advertisement process:

- 1. Contactor selected to participate in the design though best-value process.
- 2. The Contractor reviews and evaluates the design throughout the design process and contributes ideas and innovations to reduce cost and risk.
- 3. The team enhances the project with a value-engineering goal in mind.
- 4. Only one contractor prepares a bid for construction.

Goals and Objectives

The main goals and objectives of the CMGC advertising process are:

- 1. Meet Department themes.
 - Accelerate Delivery
 - Encourage Innovation
 - o Decrease and Minimize MOT
 - Get a Good Price
- Obtain confidential bids from Independent Cost Estimator (ICE) and compare to bids from Contractor and Engineer
- 3. Ensure bids are based on the same quantities, assumptions, and risks
- 4. Obtain a Contractor bid that is at or below traditional market price for each bid item
- 5. At least 80 percent of the bid items are the same as found in traditional competitive projects and include quantities, unit prices, profit and overhead.
- 6. Engineer and Contractor communicate openly to establish unit prices

To meet these goals and objectives, the CMGC process is exempt from some of the rules that are traditionally in place to ensure that information is distributed fairly to multiple contractors. This document presents guidelines for the advertising process on CMGC projects. The following sections describe the bid resolution and contract award process. This process may be modified and tailored by the UDOT project manager (PM) to meet the goals of the project under the following conditions:

- 1. The alternative process adheres to the goals and objectives listed above
- 2. The project team follows the alternative process

3. The Innovative Contract Engineering or the Engineering Services Director approves the alternative process

Bid Analysis and Resolution

This section details the guidelines for meeting the goals for the CMGC advertising process and outlines the process followed for bid resolution. See the attached Bid Resolution flow chart for a diagram of the process.

Pre-bid Cost Evaluations

The UDOT PM and other UDOT specialists guide the design process to balance quality, cost, and schedule. Innovative Contracting methods guide the UDOT team, designers, and contractors in the goals, objectives, roles, and responsibilities inherent in the CMGC design process. Throughout the design process the design staff and the contractor discuss design alternatives. The contractor is key in helping the designer evaluate alternatives and identify where cost savings are possible. The designer evaluates the contractor's proposed innovations to verify qualities and objectives are in line with the UDOT policy and to validate claims of cost saving.

Complete Advertisement Checklist

The project team completes the advertising checklist along with the design development and cost estimates. The CMGC checklist requires the same approvals as traditional projects with some unique additions. Additions include approval to use the CMGC delivery method on the project, and an approved construction-phasing plan. The project team must use the most current version available on the UDOT web page.

The checklist includes the following critical elements that are required to develop a construction contract:

- 1. Proof of environmental clearance
- 2. Right-of-way, traffic, bridge design, and utilities certifications
- 3. Risk assessment checklist
- 4. Letter from designer certifying completion of design
- 5. All other necessary design support documents consistent with UDOT's Design-Bid-Build process

Send checklist documents to the Region technicians in the weeks leading up to the advertisement date. The project team may begin submitting checklist items as soon as they are available, and early submission of checklist items is encouraged. The Region forwards the verified advertising package to the UDOT Construction and Systems Planning and Programming (SP&P) Finance office once all necessary items on the checklist have been received. SP&P makes a formal submittal requesting authorization for bid advertisement to Carlos Braceras for State only funded projects, and FHWA for federally funded projects. The time from receipt of the advertising checklist by the Region to receipt of FHWA authorization varies depending on the completeness of the checklist and the workload of the UDOT Construction office and the UDOT SP&P office. This process takes a minimum of one week but typically takes two weeks for federal projects and 24 – 48 hrs for state funded projects.

Guaranteed Maximum Price

The contractor's bid becomes the Guaranteed Maximum Price (GMP) with the exception of risks that were identified in design and for which UDOT has decided to take ownership. The contractor's final bid, or GMP, does not include the cost of these risks. The UDOT PM sets up Risk Contingency Funding to cover these known risks. The contractor's GMP combined with the Risk Contingency Funds represents the total GMP which must be within the Commission Approved Amount for the project.

Bid Advertisement

The bid advertisement is the formal request for the contractor and the ICE to submit their bid on the approved design package. The R-709 must be approved before the bid package is released to the contractor on federally funded projects. The UDOT Construction office sends a formal letter transmitting the plan sets to the contractor. This letter begins a one-week minimum count down prior to bid opening. The ICE and the contractor are required to take at least a week to finalize their bids.

Because the contractor has been an integral part of the design process, and has working copies of the plan set, the development of the GMP is a shorter process than in a design-bid-build environment. Larger, more complex projects may require more than a week to prepare a bid. Smaller projects may require only a few days. The project team must communicate openly with the contractor and the ICE to determine an acceptable timeframe for bid preparation.

At this point the ICE has attended design, review, and measurement and payment meetings. As a result, the ICE and the contractor have had the same amount of time and information with which to prepare a bid. The contractor and the ICE should already have solid draft bids prepared and only need to verify and update their bids based on any final changes to the plan set.

A template of the formal transmittal letter is included in Appendix B. This formal transmittal of the final plan set ensures that the contractor is bidding from the official plans, specifications and estimates (PS&E) package that will become a part of the contract. The formality of transmittal ensures that the contractor and ICE are bidding on the same project and that they are bidding on the official plan set. This protects both UDOT and the contractor. The following will occur if a correction or clarification to the plan set is required, depending on the timing of the discovery of errors:

- Before the bid opening: An addendum will be issued in coordination with the construction office and there is typically an 11-day time extension before the bid opening.
- After bid opening, but before award: The project will be rebid. The updated plan sets are formally distributed to the contractor and the ICE. The electronic vault is reopened. The advertisement checklist does not need to be resubmitted. The time required to rebid may be shorted to 1-2 days, depending on the complexity of the update to the plan set and the judgment of the construction office.
- After construction has begun: A change order will be processed in accordance with the UDOT and FHWA established procedures (08B-10).

Bid Submittal

UDOT contracting creates an "electronic vault" for secure submittal of bids. The Engineer, ICE, and Contractor each submit their bids into the electronic vault anytime between the bid advertisement date and the bid opening date. The vault is set up so that they cannot see each other's bids. Standard bid item numbers are used for bid line items so that these items can be compared to average state prices.

Prior to bid submittal, the Standards group in Engineering Services analyzes and validates the Engineer's Estimate (EE). This analysis is performed under the direction of the CMGC Manager to make sure that the EE uses reasonable assumptions and has not been overly influenced by the contractor in design pricing meetings. The validation of the EE can occur anytime after the EE is complete if a correction or clarification to the plan set is required.

Initial Bid Opening

The contractor and the ICE are given a minimum of one week to prepare bids prior to bid opening. The contractor is included in the design process and has already developed cost estimates; therefore one week is normally adequate time for both the contractor and the ICE to prepare bids. The project team will determine the actual time allowed to prepare bids based on the complexity of the project and other factors. All CMGC projects require a minimum of a one-week advertising period.

The CMGC Program Manager conducts the bid opening with the support of UDOT PM, ICE, Designer, and other UDOT and FHWA representatives. The contractor is not present at the bid opening. This allows UDOT, the ICE, and the designer to openly discuss any concerns with the contractor's bid. A separate meeting (preferably on a separate day) is then held with the contractor to discuss the bid. The contractor must be prepared to "open the books" and discuss the assumptions that went into each line item in the bid, particularly the large lump sum items such as mobilization and traffic control.

UDOT compares the contractor's bid or GMP plus UDOT contingency to the Commission Approved amount upon bid opening. This total must be less than the Commission Approved amount. The Engineer Estimate and the contractor's GMP bid are also compared and are expected to agree within 5 percent of each other. The contractor's GMP bid must be no higher than 110 percent of the ICE for a construction contract to be awarded. UDOT will compare individual bid items to see if each major item is within 10 percent of the ICE. The unit prices that the contractor provided in his initial proposal to be selected as the CMGC contractor are compared to the unit prices in the contractors GMP bid.

UDOT has developed two options if all the conditions above are not met.

- Discuss particular bid items of concern with the contractor, ICE, and Design Engineer and rebid (see Final Bid Opening below). The CMGC Program Manager facilitates this discussion. The contract may be awarded if the initial GMP bid is deemed acceptable based on this discussion.
- 2. If the GMP bid is deemed unacceptable based on this discussion, sever CMGC and prepare the design for release to the public for open competitive bids.

Final Bid Opening

The ICE and contractor are given the opportunity to revise their costs to better correlate with each other if the initial GMP is deemed unacceptable and UDOT decides to move to a second, final bid opening. The UDOT PM and CMGC Program Team will address specific GMP bid

items of concern with the contractor prior to revision. The electronic vault is reopened and the cost estimates and GMP bid are resubmitted. The contract may be awarded if the cost is deemed acceptable based on the comparisons outlined above. Otherwise, the bid abstract is not posted for public view and the design is prepared for public bid in a traditional low-bid process. The contractor does not participate in the final bid opening but is notified after the decision has been made. An award decision is based solely on the comparison of the ICE, EE and contractor's price proposals as outlined in the initial bid opening described above.

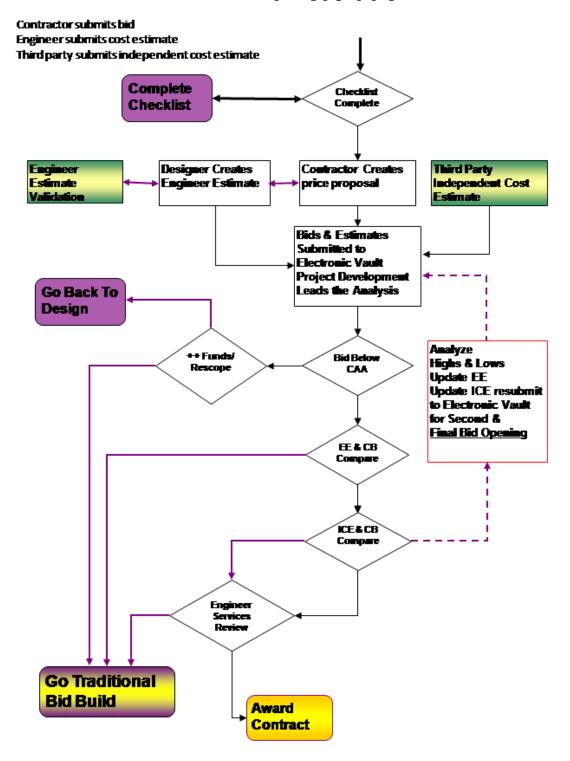
Contract Award

An escrow review is performed followed by a notice of award if the contractor's GMP bid is deemed acceptable. The construction contract is then executed. The contract will be awarded to the winner of the bidding process if the design goes back out for a competitive bid. The contractor who participated in the design may participate in the open competitive bidding if that contractor is not awarded the contract. Their original CMGC proposed price is not posted and remains closed to the public. Their competitive price will be revealed with the other competitive bidders in a traditional bid opening process.

Appendix

A. Bid Resolution Flow Process

Bid Resolution



B. Plan Set Delivery Letter/Notice to Contractor Templates

C. Explanation of terms

- CM/GC: Construction Manager / General Contractor (CM/GC) is a construction project delivery system where, in contrast to traditional design-bid-build the design and construction aspects are contracted for with a team made up of a contractor and a designer who are selected based on price, value and qualifications. This team is used to minimize the project risk for an owner and to implement innovations resulting from having the contractor involved in the design process. This team relies on the expertise of the contractor to deliver a better product in less time and at a lower cost than a design-bid-build construction process.
- Construction-phasing plan: This plan outlines the work that will be completed in each construction phase.
- Electronic vault: A secure online site where information can be uploaded to, but not be accessed by unauthorized personnel. This site allows bids to be entered from separate entities without them seeing each others bids.
- Engineering Estimate: A cost estimate prepared by a UDOT in house engineer or a consultant based mostly on historic data to validate the prices given to us by the contractor
- Escrow review: A review of the contract to ensure it meets all the needs of the various disciplines involved such as right of way, roadway design, budgeting as well as the internal UDOT goals.
- ICE Estimate: A cost estimate prepared by an independent third party entity based on current market prices to validate the prices given to us by the contractor.
- GMP: The Guaranteed Maximum Price (GMP) is the highest price the contractor can charge to complete a project. When a contractor bids on a project he submits this GMP, and UDOT can accept or reject his bid. Any addition to this price must be done with a change order.
- ICE: The Independent Cost Estimator (ICE) is an independent third party that submits a bid to compare to the estimate prepared by the UDOT engineer and the contractors bid.